

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently amended) An isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of:
  - a) SEQ ID NO. 2, SEQ ID NO. 4, SEQ ID NO. 6, SEQ ID NO. 8, or SEQ ID NO. 10;
  - b) ~~a nucleic acid sequence encoding amino acid SEQ ID NO. 3, SEQ ID NO. 5, SEQ ID NO. 7, SEQ ID NO. 9 or SEQ ID NO. 11;~~
  - [[c]] b) ~~a complementary nucleic acid sequence of SEQ ID NO. 2, SEQ ID NO. 4, SEQ ID NO. 6, SEQ ID NO. 8, or SEQ ID NO. 10; [[and]]~~
  - c) a nucleic acid sequence comprising at least 289 consecutive nucleotides of SEQ ID NO. 2 or SEQ ID NO. 4;
  - d) ~~a nucleic acid sequence comprising at least [[50]] 500 consecutive nucleotides of which hybridizes under stringent conditions to SEQ ID NO. 2, SEQ ID NO. 4, SEQ ID NO. 6, SEQ ID NO. 8, or SEQ ID NO. 10 [.]~~; and
  - e) a complement of (c) or (d).
2. (Original) The isolated nucleic acid of Claim 1 which is DNA.
3. (Original) The isolated nucleic acid of Claim 1 which is RNA.
4. (Original) An expression vector containing the nucleic acid of Claim 1.
5. (Original) A host cell containing the vector of Claim 4.

6. (Original) The host cell of Claim 5 which is a eukaryotic cell.

7. (Original) The host cell of Claim 6 which is a human cell.

8. (Original) The host cell of Claim 5 which is a prokaryotic cell.

9. (Currently amended) An isolated Isolated DNA or RNA comprising at least 50 consecutive nucleotides of:

a) 289 consecutive nucleotides of SEQ ID NO. 2, or SEQ ID NO. 4[.], SEQ ID NO. 6, SEQ ID NO. 8, or SEQ ID NO. 10; or

b) a complementary nucleic acid sequence of SEQ ID NO. 2, SEQ ID NO. 4, 500 consecutive nucleotides of SEQ ID NO. 6, SEQ ID NO. 8, or SEQ ID NO. 10[.], or

c) a complement of (a) or (b).

10. (Cancelled)

11. (Original) An expression vector containing the DNA or RNA of Claim 9.

12. (Original) A host cell containing the vector of Claim 11.

13. (Currently amended) The host cell of claim [[5]] 12 which is a eukaryotic cell.

14. (Currently amended) The host cell of claim [[6]] 13 which is a human cell.

15. (Currently amended) The host cell of claim [[5]] 12 which is a prokaryotic cell.

16. – 20. (Cancelled)

21. (Currently amended) An isolated polynucleotide comprising the nucleotide sequence of variant of SEQ ID NO. 2, or SEQ ID NO. 4, SEQ ID NO. 6, SEQ ID NO. 8, or SEQ ID NO. 10 wherein position 1389 has a cytosine to thymine substitution, wherein the variation contains one or more SNPs from Table 5.

22. – 26. (Cancelled)

27. (Currently amended) An isolated nucleic acid fragment comprising at least [[15]] 289 consecutive nucleotide bases of ~~BAC RP11-0702C13 of the nucleotide sequence SEQ ID NO. 1.~~

28. – 31. (Cancelled)

32. (Currently amended) ~~A kit for detecting chromosome 12 disorder in a biological sample comprising a probe containing a nucleic acid sequence of Claim 1 and hybridization reagents, wherein said kit detects chromosome 12 disorder in a biological sample.~~

33. (Cancelled)